Generations go, generations come, Earth abides.
Ecclesiastes

Estimates of total human population in the last 50,000 years number about one hundred billion: 100,000,000,000.

We accrue ancestors in a geometric progression by a factor of two.

2, 4, 8, 16, 32, 64, 128, 256, 512, 1024… where at forty generations we've 549,755,813,888 ancestors. Add one generation and we've over a trillion ancestors. We don't grasp the scale of large numbers.

A thousand seconds is about 17 minutes,
a million seconds is almost 12 days,
a billion seconds is 31.7 years,
a trillion seconds is 31,709.8 years.

A generation averages about 26-27 years. Forty generations takes us Europeans to Charlemagne's grandchildren. Not once, or twice, but hundreds of times, or more. I've read several papers which construct mathematical models to this end. The simplest considered that everyone living in Europe one thousand years ago, who had living descendants two hundred years later, are the ancestors of most all living Europeans. The 14th Century Black Death bottleneck reduced half our troop & sex is an equality of humans between social classes.

This adventure for me began in the early 2000s with a Quest class at WWCC of Spencer Well's *The Human Odyssey, The Journey of Man*. The video is available on YouTube.

Something most will never think about, cousin.

Humans Are All More Closely Related Than We Commonly Think
Scientific American, Scott Hershberger, October 2, 2020